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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/714,754	11/17/2003	Klaus Kuepper	588.1002	3376
23280	7590	02/24/2005	EXAMINER	
DAVIDSON, DAVIDSON & KAPPEL, LLC			BEHNCKE, CHRISTINE M	
485 SEVENTH AVENUE, 14TH FLOOR			ART UNIT	PAPER NUMBER
NEW YORK, NY 10018			3661	

DATE MAILED: 02/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/714,754

Applicant(s)

KUEPPER ET AL.

Examiner

Christine M. Behncke

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 November 2004.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-15 and 17-20 is/are rejected.
7) ☒ Claim(s) 12 and 16 is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 17 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This office action is in response to the Remarks filed 22 November 2004, in which claims 1-20 were presented for examination.

Specification

2. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: Claim 16: "engine speed regulation is implemented by a speed offset"; speed offset is not detailed in the presented specification.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-3, 6, 7, 10, 11, 13, 14, 17, 19, and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Fritzer et al. US Patent Application Publication 2002/0084129.

4. **(Claim 1)** Fritzer et al. discloses a method for controlling and/or regulating a torque transmission system in a drive train, a clutch torque being changed as a function

of a starting resistance of the vehicle in order to implement a strategy for starting the vehicle ([0014] and [0021]-[0022]), the method comprising the step of: modifying the strategy so that a progression of the clutch torque is adjusted to a starting situation ([0073]-[0074] and [0078]-[0079]).

5. **(Claim 2)** Fritzer et al. further discloses wherein the strategy influences the progression of the clutch torque as a function of the engine speed ([0110]).

6. **(Claim 3)** Fritzer et al. further discloses wherein for the starting situation of the vehicle on a hill, the clutch torque is built up slowly ([0054] and [0073]).

7. **(Claim 6)** Fritzer et al. further discloses running a starting aid routine integrated in the strategy ([0110]-[0111]).

8. **(Claim 7)** Fritzer et al. further discloses running a multistage starting aid routine in the strategy ([0110]-[0111] and [0037]-[0040]).

9. **(Claim 10)** Fritzer et al. further discloses wherein roll direction recognition of the vehicle is implemented in the starting aid routine ([0044], [0048], [0068] and [0073]-[0074]).

10. **(Claim 11)** Fritzer et al. further discloses wherein the roll direction is recognized in any driving situation of the vehicle with the aid of at least one sensor ([0044]).

11. **(Claim 13)** Fritzer et al. further discloses wherein engine speed regulation is provided in the starting aid routine ([0110]).

12. **(Claim 14)** Fritzer et al. further discloses wherein, in the engine speed regulation, the clutch torque is reduced before the engine speed reaches a preset target engine speed ([0119] and [0120]).

13. **(Claim 17)** Fritzer et al. further discloses determining if the vehicle is starting on a hill ([0044]), and if so, building up the clutch torque at a predetermined rate ([0054] and [0073]).
14. **(Claim 19)** Fritzer et al. further discloses wherein the vehicle is a motor vehicle (Abstract).
15. **(Claim 20)** Fritzer et al. discloses a method for controlling and/or regulating a torque transmission system in a drive train, a clutch torque being changed as a function of a starting resistance of the vehicle in order to implement a strategy for starting the vehicle comprising the steps of: determining if a starting resistance of the vehicle is above a certain level ([0014] and [0021]-[0022]), and if so, modifying the strategy so that a progression of the clutch torque is adjusted by modifying a factor altering the clutch torque, the factor being modified by setting the factor to a first amount during a first time period ([0059]) so as to reduce the clutch torque, and increasing the factor by a predetermined rate after the first time period ([0059] and claims 33 and 34).

Claim Rejections - 35 USC § 103

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4, 5 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fritzer et al. in view of Heuer, US Patent No. 5,154,268.

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17. **(Claim 4 and 18)** Fritzer et al. discloses the method discussed previously but does not disclose the situation of the vehicle over a curb. However, Heuer teaches when a vehicle is to move over an obstacle, or curb the clutch torque is built up rapidly, or faster than a predetermined rate (Column 2, lines 41-50).

18. **(Claim 5)** Fritzer et al. discloses the method discussed previously but does not explicitly disclose determining the vehicle velocity for use in the strategy. However, Heuer teaches determining a velocity of the vehicle for use in the strategy (Column 1, line 63- Column 2, line 6).

19. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the method of Fritzer et al. with the teachings of Heuer because the preparation of the vehicle control system for moving over an obstacle by increasing the applied torque would increase the clutch's performance and decrease the clutch slippage and thus wear.

Claim Rejections - 35 USC § 103

20. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fritzer et al. in view of Graf et al. US Patent No. 6,766,238.

21. Fritzer et al. discloses the method discussed previously, Fritzer et al. further discloses a multistage starting aid routine wherein a first and second stage are provided ([0110]-[0111] and [0037]-[0040]), but Fritzer et al. does not discloses wherein a higher maximum speed is implemented in the second stage. However, Graf et al. does teach that it is well known in the art for a drive train controller to comprise a plurality of stages, including a second stage wherein a higher maximum speed is implemented than in the first stage ([0006]).

22. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the method of Fritzer et al. with the teachings of Graf et al. because using a multiple staged method allows the controller to optimize a better performance from the drive train.

Claim Rejections - 35 USC § 103

23. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fritzer et al. in view of Yamaguchi et al. US Patent No. 6,095,942.

24. Fritzer et al. discloses the method previously discloses but does not explicitly disclose a target engine speed determined by two components, a constant and a function of engine speed gradient. However, Yamaguchi et al. does teach wherein for

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engine speed regulation (Abstract), a target engine speed is determined by a constant component in combination with a second component, the second component being a function of the engine speed gradient (Column 2, lines 38-49 and Column 5, lines 31-46).

25. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the method of Fritzer et al. with the teachings of Yamaguchi et al. because creating a target engine speed that is suitable to the road gradient would increase the driver's safety and better performance of the vehicle.

Allowable Subject Matter

26. **Claims 12 and 16** are objected to as being dependent upon a rejected base claim and are at present considered to overcome the prior art of record if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion


27. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christine M. Behncke whose telephone number is (703) 305-0589. The examiner can normally be reached on Monday - Friday 8:30 AM - 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas G. Black can be reached on (703) 305-8233. The fax phone

number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

02-18-2004


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